# Definitive Technology® The Leader in High-Performance Loudspeakers®

# Mythos Gem XL

Satellite/Surround Speaker System

### Owner's Manual

# **Congratulations**

Congratulations on your purchase of the Definitive Technology Mythos Gem XL Satellite/Surround Speaker System. This revolutionary loudspeaker utilizes state-of-the-art components (homopolymer-coned bass-midrange drivers, moving coil ferrofluid-cooled pure aluminum dome high frequency radiators, uniphase crossover networks, etc.), housed in a beautiful non-resonant polished aluminum aircraft-grade cabinet in order to achieve the most lifelike sound possible in your listening room for many years to come.

Your Mythos Gem XL is a unique speaker which may be used as a high-performance rear or side surround matched with any of our Mythos or any of our other fine speakers. In addition, it is a superb front left and right satellite speaker which may be combined with any of our subwoofers. Four Mythos Gem XL speakers combined with a Mythos Three center channel and a Definitive subwoofer make a fantastic, complete, high-performance home theater 5.1 speaker system.

#### Please Inspect For Shipping Damage

Each loudspeaker leaves our plant in perfect condition. Any visible or concealed damage most likely occurred in handling after it left our plant and should be reported at once to your Definitive dealer or the shipping company which delivered your loudspeaker.

## **Connecting Your Loudspeakers**

It is critical for proper performance that both speakers (left and right) be connected in proper phase. Note that one terminal on each speaker (the +) is colored red and the other (the -) is colored black. Please make certain that you connect the red (+) terminal on each speaker to the red (+) terminal of its channel on your amplifier or receiver, and the black (-) terminal to the black (-) terminal. It is essential that both speakers be connected in the same way to the amplifier (in phase). If you experience a great lack of bass, it is likely that one speaker is out of phase with the other.

Usually if distortion is heard when the speakers are being driven at loud levels, it is caused by driving (turning up) the amplifier too loud and not driving the speakers with more power than they can handle. Remember, most amplifiers put out their full rated power well before the volume control is turned all the way up! (Often, turning the dial half way up is actually full power.) If your speakers distort when you play them loud, turn down the amplifier or get a bigger one.

### Mythos Gem XL is a Very Versatile Speaker

The Mythos Gem XL is a tremendously versatile speaker which makes a perfect left and right channel front satellite speaker (when used with a Definitive subwoofer) as well as a superb rear or side surround speaker. We will describe the various aspects of its use for both of these applications starting with the simplest instructions first: for its use as a rear or side surround.

# Positioning the Mythos Gem XL as a Rear or Side Surround Speaker

#### For Rear or Side Surround Speakers

The Mythos Gem XL is designed to be extremely flexible in terms of their placement when used as surround speakers. They may be used on the side walls, rear walls or in the rear corners of the listening room. When placed along the side walls the speakers should normally be located adjacent to or behind the listening position. The speakers may also be placed near the rear corners of the room or located on the rear wall. If you have your couch or listening position near or against the rear wall, we suggest rear wall placement of the Mythos Gem XL with them positioned on either side of the couch and in from the side wall. High placement is preferred; however, midwall or floor placement is certainly acceptable. Normally speakers would be hung on the wall with the input connection plate up against the wall, however, the Mythos Gem XL may also be placed on shelves or stands. Of course, experimentation is encouraged to get the best performance in your particular room. As a starting point, we suggest mounting the speakers on the side walls behind the listening position about 3-6 feet off the floor and halfway between the listening position and the rear wall.

When using Mythos Gem XL in Dolby EX and other 6.1 and 7.1 systems (which they are perfect for), one pair will normally be located on the side walls as described

above and an additional 1 or 2 speakers will be located on the rear wall as described above. **IMPORTANT, PLEASE READ:** When the Mythos Gem XL is used as a rear or side surround speaker, the bass management of your receiver or decoder for those channels should be set to "Small."

# Using the Mythos Gems XL in Conjunction with a Definitive Sub

When a pair of Mythos Gem XLs is used in conjunction with a Definitive sub, they may be connected either directly to the left and right channel of your amplifier or receiver, or to the left and right speaker level outputs on a Definitive sub (when the Definitive sub is connected via the high-level speaker wire inputs to the left and right channel speaker outputs on your receiver). Connecting the Mythos Gem XLs to a Definitive Sub (which includes a built-in high-pass crossover for the Mythos Gem XLs) will result in greater dynamic range (the system can be played louder without overdriving the satellites) and is recommended for most installations, especially when the system is being used for home theater. Because this is the most common set-up, the following instructions relate to wiring the Mythos Gem XLs to a Definitive sub.

Wiring 2 Mythos Gem XLs and 1 Definitive Sub for Stereo (2-Channel) Use 1) First, wire the red (+) terminal of the left channel speaker wire output of your receiver or amplifier to the red (+) terminal of the left channel speaker wire (high level) input of your Definitive Sub.

- 2) Next, wire the black (-) terminal of the left channel speaker wire output of your receiver or amplifier to the black (-) terminal of the left channel speaker wire (high level) input of the Definitive sub.
- 3) Repeat Steps 1 and 2 for the right channel.
- 4) Wire the red (+) terminal of the left Mythos Gem XL to the left channel red (+) speaker wire (high level) on the back of the Definitive sub.
- 5) Wire the black (-) terminal of the left Mythos Gem XL to the left channel black (-) speaker wire (high level) on the back of the Definitive sub.
- 6) Repeat steps 4 & 5 for the right Mythos Gem XL.
- 7) Set the low frequency filter control on the back of the Definitive sub to approximately 2 o'clock. Please note that the exact frequency will depend on many factors including specific positions of the speakers in the room, so you might experiment with a slightly higher or lower setting to achieve ideal blending between the sub and the satellites for your particular set-up. Listen to a wide variety of music to determine the correct setting for this in your system.
- 8) Set the subwoofer level control so that it sounds properly balanced with the satellites. Please note that the exact level depends on many factors including your room size, position of the speakers, etc. as well as your personal listening taste, so you might experiment with the subwoofer level while listening to a wide variety of music until you achieve the ideal setting for your system.
- 9) If your receiver allows you to choose whether or not the main speakers are to receive a full-range signal, choose full range (or "Large Left and Right Main Speakers").

# Using Mythos Gem XLs with a Definitive Sub in Home Theater

There are many different variations of the basic Dolby ProLogic and Dolby Digital AC-3 formats and features, as well as a multiplicity of ways in which the speakers can be hooked up to these systems. We will discuss the simplest and most effective hookups and adjustments. If you have a particular question regarding your set-up, please call us.

#### For Dolby ProLogic Systems

Follow Steps 1-9 provided earlier. The subwoofer will receive its low frequency signal through the full-range speaker level outputs. If, however, your system has a separate subwoofer RCA low level output which has a remote control level adjustment, you might also want to hook this up using an RCA-to-RCA low level cable to the LFE/subwoofer-in low level input (the lower RCA input) on a Definitive sub. Then use your remote control sub level adjustment to fine-tune the low frequency level for different types of program material. You might find you want a higher level for some music or for movies.

#### For Dolby Digital AC-3 5.1 Systems

Please note that Dolby Digital decoders have bass management systems (systems that direct the bass to the various channels) which vary from unit to unit. It is absolutely critical that the bass management system be properly set in order to achieve proper performance.

The simplest way to hook up and use your system with Dolby Digital decoders is to hook up the left and right front Mythos Gem XLs and Definitive sub as described in Steps 1 through 9 earlier. Wire your center channel to the center channel out on your receiver (or center channel amplifier) and your left and right rear surround speakers to the rear channel outputs on your receiver or rear channel amplifier (taking care that all speakers are in phase, i.e. red (+) to red (+) and black (-) to black (-). Set the bass management system of your receiver or decoder for "Large" left and right main speakers, "Small" center, "Small" rear surround speakers and "No" subwoofer. All the bass information including the .1 channel LFE signal will be directed to the main left and right channels and into the subwoofer giving you all the benefits of Dolby Digital AC-3 5.1.

#### **Optional Hook-Up**

An option on this hook-up (if your decoder will allow you to select "Large" left and right main speakers and "Yes" subwoofer), in addition to the hook-up as described above, is to use an RCA- to-RCA low level cable to connect the LFE/sub-out on your receiver to the low-level LFE/sub-in (the lower RCA input) on a Definitive sub. Tell your bass management system that you have "Large" left and right main speakers, "Yes" subwoofer and "Small" center and "Small" surrounds. You will then be able to raise the LFE .1 channel level being fed to the subwoofer by either using the LFE/sub remote level adjustment on your decoder (if it has one) or the LFE .1 channel level control on your Dolby Digital channel balancing procedure. This set-up has the advantage of allowing you to set the low frequency level on the Definitive sub for smooth balance with music while also allowing you to "juice up the bass" for movies with the controls on your decoder. It should also sound somewhat better.

#### Variation on the Optional Hook-up

One variation on the optional hook-up is to hook up and adjust the system as described under "Optional Hook-Up" except select "Small Left and Right Main Speakers" and a "Subwoofer" on the bass management system (along with "Small Center" and "Small Rear Surrounds"). The advantage of this over the Optional Hook-Up will be somewhat greater dynamic range (i.e., you can play the system louder). However, depending on the specific characteristics of the crossovers designed into your bass management system, the transition and blending between the satellites and subwoofer may not be quite as smooth and continuous as the Optional Hook-Up, or with the basic hook-up detailed above in Steps 1-9. However, if you wish to play the system louder, you can experiment with this variation. In addition, this variation is also one which can be used if your decoder bass management system does not allow a "Large Left and Right Main Speakers" and "Subwoofer" setting.

We encourage you to experiment with the various settings on your subwoofer, settings on your decoder, and hook-up options as described until you find the best combination for you.

# Using Mythos Gem XLs with a Definitive Sub for Rear Channel Surround Use

Since Dolby Digital is capable of delivering a full-range bass signal to the rear channels, some more elaborate systems will include an additional Definitive sub for the rear channels. In this case, simply wire the Mythos Gem XLs to the Definitive sub as described in 1 thru 8 earlier, except wire to the rear surround outputs. Set the bass management system for "Large Rear Speakers."

### Speaker Break-In

Your Mythos Gem XLs should sound good right out of the box; however, an extended break-in period of 20-40 hours or more of playing is required to reach full performance capability. Break-in allows the suspensions to work in and results in fuller bass, a more open "blossoming" midrange and smoother high frequency reproduction.

# Positioning Mythos Gem XLs when Used as Front Main Speakers in Your Room

It is important that some simple set-up recommendations be followed in order to assure optimum performance in your room. Please remember that although these recommendations are usually valid, all rooms and listening set-ups are somewhat unique, so do not be afraid to experiment with the speakers. Remember, whatever sounds best to you is correct.

The Mythos Gem XL Loudspeakers may be placed on a stand or shelf or be mounted on the wall. Placement close to the wall will increase the bass output while placement further from the rear wall will decrease the bass output.

When used as fronts, the speakers should usually be placed 6 to 8 feet apart and kept away from the side walls and corners. A good rule of thumb is to place the speakers separated by one half the length of the wall they are positioned along, and each speaker one quarter the length of the wall behind them away from the side wall.

## Mounting Your Mythos Gem XL with the Supplied Wall-Mount Template

Your Mythos Gem XL comes with an optional wall-bracket designed to securely mount your speaker flush to your wall. The bracket can ONLY be used with a vertical installation. For safety, it is extremely important that this bracket be installed with molly-bolts or similarly effective fasteners appropriate for the construction of your wall. Be sure to use all six of the mounting holes when fastening the bracket to the wall. Never use unanchored or improperly anchored screws in your wall. Professional installation is strongly recommended. Your dealer can either arrange this for you, or refer you to a qualified installer.

To determine the bracket's position on the wall, use the mounting template which comes with your speakers. If you are mounting your Mythos Gem XL close to anything above it, please allow an extra 11/4 inches above the top of the speaker for the speaker to slide onto its bracket.

If your speaker wires are to be hidden inside the wall, be sure to conform to your local building codes. When installed on the bracket, the center of the Mythos Gem XL speaker terminals will be as indicated on the template.

To install the Mythos Gem XL on its bracket, securely fasten the mounting screw supplied into the threaded hole on the rear of the speaker, screwing it in as far as it will go. The speaker will then hang in the "keyhole" on the bracket. After placing the screw in this opening, pressing down firmly on the top of the speaker will seat the speaker properly and avoid any rattles during use.

In addition, the Mythos Gem XL has a threaded insert on the back which may be used with a wall-mount pivoting bracket such as the Definitive ProMount 80.

#### VERY IMPORTANT: SETTING CHANNEL BALANCE AND BASS MANAGEMENT SYSTEMS

Dolby Digital and Dolby ProLogic systems and decoders have a critical channel balancing procedure for the left and right front speakers, center channel, rears and subwoofer (if it is hooked up through the LFE or Sub Out low-level connection) which must be followed if the system is to perform properly. We have spoken with many system users with problems relating to the overall sound of their system which could be clearly traced back to improper system balance.

Also note that Dolby Digital decoders have bass management systems (systems which direct the bass to the various channels) which vary from unit to unit. This bass management system must also be properly adjusted. If your Mythos Gem XL loudspeakers are hooked up with speaker level wires coming directly from your amplifier and you are using a separate subwoofer which is connected to your receiver only with a LFE low-level connection, your receiver's or decoder's bass management system should be set for "Small" left and right main speakers, "Small" center, "Small" surrounds, and "Yes" subwoofer. If your Mythos Gem XL loudspeakers are hooked up with speaker level wires coming directly from your subwoofer (as described in the hook-up directions) and your subwoofer is connected to your receiver or amplifier with speaker level wire, then your receiver's or decoder's bass management system should be set for "Large" left and right main speakers, "Small" center, "Small" surrounds, and "No" subwoofer if your subwoofer is just hooked up to your amplifier with speaker level wires, or "Yes" if your subwoofer is hooked up to your amplifier with both speaker wires and a LFE low-level connection (as described in the hook-up directions). If you are using the Mythos Gem XL speakers as rear or side surround speakers, set the rear or side surround bass management to "Small". Also, do not be afraid to experiment. Remember, whatever sounds best to you is correct.

### **Technical Assistance**

It is our pleasure to offer assistance if you have any questions regarding your Mythos Gems or their set-up. Please contact your nearest Definitive Technology dealer or contact us directly at 410-363-7148.

### **Service**

Service and warranty work on your Definitive loudspeakers will normally be performed by your local Definitive Technology dealer. If, however, you wish to return the speaker to us, please contact us first, describing the problem and requesting authorization as well as the locations of the nearest factory service center. Please note that the address given in this booklet is the address of our offices only. Under no circumstances should loudspeakers be shipped to our offices or returned without contacting us first and obtaining return authorization.

Definitive Technology Offices 11433 Cronridge Drive, Suite K Owings Mills, Maryland 21117 phone: 410-363-7148

#### **Mythos Gem XL Specifications**

**Dimensions:**  $12^{5}/8$ "H x  $5^{1}/2$ "D x  $4^{1}/2$ "W

**Frequency Response:** 50Hz – 30kHz

**Efficiency:** 89 dB

**Nominal Impedance:** Compatible with 4 - 8 ohm outputs

**Driver Complement:** Two 4.5" long-throw cast-basket bass/midrange drivers

with butyl rubber surrounds, one ferrofluid-dampened

1" pure aluminum dome tweeter

**Enclosure:** Polished extruded aircraft-grade aluminum

**Rec. Assoc. Amplification:** 10 - 200 watts per channel

#### Limited Warranty: 5-Years for Drivers and Cabinets, 3-Years for Electronic Components

Definitive Technology warrants to the original retail purchaser only that this Definitive Technology Loudspeaker Product (the "Product") will be free from defects in materials and workmanship for a period of five (5) years covering the drivers and cabinets, and three (3) years for the electronic components from the date of the original purchase from a Definitive Technology Authorized Dealer. However, this warranty will automatically terminate prior to the expiration of five (5) years for the drivers and cabinets and three (3) years for the electronic components if the original retail purchaser sells or otherwise transfers the Product to any other party. The original retail purchaser shall hereinafter be referred to as "you." Defective Products must be shipped, together with proof of date of purchase, prepaid insured to the Authorized Dealer from whom you purchased the Product, or to the nearest factory service center. Product(s) must be shipped in the original shipping container or its equivalent; in any case the risk of loss or damage in transit is to be borne by you. If, upon examination at the Factory or a Definitive Technology Authorized Dealer, it is determined that the unit was defective in materials or workmanship at any time during this Warranty period, Definitive Technology or the Definitive Technology Authorized Dealer will, at its option, repair or replace this Product at no additional charge, except as set forth below. All replaced parts and Product(s) become the property of Definitive Technology. Product(s) replaced or repaired under this Warranty will be returned to you, within a reasonable time, freight collect.

This Warranty does not include service or parts to repair damage caused by accident, misuse, abuse, negligence, inadequate packing or shipping procedures, commercial use, voltage in excess of the rated maximum of the unit, cosmetic appearance of cabinetry not directly attributable to defects in materials or workmanship, or service, or repair or modification of the Product which has not been authorized by Definitive Technology. Definitive Technology makes no Warranty with respect to its Products purchased from dealers or outlets other than Definitive Technology Authorized Dealers. This Warranty is in lieu of all other expressed Warranties. If this Product is defective in material or workmanship as warranted above, your sole remedy shall be repair or replacement as provided above. In no event will Definitive Technology be liable to you for any incidental or consequential damages arising out of the use or inability to use the Product, even if Definitive Technology or a Definitive Technology Authorized Dealer has been advised of the possibility of such damages, or for any claim by any other party. Some states do not allow the exclusion or limitation of consequential damages, so the above limitation may not apply to you.

All implied warranties on the Product are limited to the duration of this expressed Warranty. Some states do not allow limitation on how long an implied Warranty lasts, so the above limitations may not apply to you. This Warranty gives you specific legal rights, and you also may have other rights which vary from state to state.

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This product complies with the essential requirements of EMC directives 89/336/EEC and 73/23/EEC (inclusive of 93/68/EEC) and carries the CE mark accordingly.